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REMARKS

Claims 1 – 23 are pending in this application. Claims 1 – 23 were rejected in the Office Action mailed September 18, 2006. Support for claim 23 may be found on page 3, lines 6-10 of the application as filed originally. No new matter has been added. Entry is requested.

Claim 23 was rejected as unpatentable under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. Claim 23 has been rewritten to the Examiner's suggestion. Withdrawal of the rejection is respectfully requested.

Claims 1, 2, 4 – 9, 15, 16 and 18 – 23 were rejected as anticipated under 35 U.S.C. 102(a) by WO 03/053728, filed by Sydes. Claim 1, as amended, requires the use of a non-reactive silicone resin emulsion in the coating composition, whereas, Sydes discloses the use of reactive wetting agents in the Examples. Support for the amendment to claim 1 may be found on page 5, lines 13-21 of the application as filed originally. Sydes discloses that suitable wetting agents include (i) silicone polyester acrylate and (ii) polyether siloxane copolymer (page 3, lines 4-7). The polyester acrylate and polyether portions of the silicone resin, as disclosed by Sydes, are reactive and undergo further reaction in the coating composition. In contrast, the Applicant's silicone resin emulsion, e.g. polydimethoxysiloxane, will not undergo further reaction in the coating composition. As anticipation under 35 U.S.C. 102(a) requires identity of invention, in view of the differences between Sydes and the present invention, it is respectfully submitted that claims 1, 2, 4 – 9, 15, 16 and 18 – 23 are patentable under 35 U.S.C. 102(a) over Sydes.

Claims 2, 3, and 11-14 were rejected as unpatentable under 35 U.S.C. 103(a) over Sydes in view of U.S. Patent No. 6,960,936, issued to Weikard et al. With respect to claim 2, the Examiner urges that it would have been obvious to substitute the preferred photoinitiators of Weikard for the preferred photoinitiator taught by Sydes. It is the position of the Examiner that the motivation is provided by the teaching of Weikard that photoinitiators easily incorporated into aqueous coating compositions are preferred for use in the polyurethane emulsions. With respect to claim 3 and 11-12, the examiner urges that it would have been obvious to have employed light stabilizers and a wax dispersing agent, taught by Weikard in analogous aqueous polyurethane emulsion, in the

compositions disclosed by Sydes, motivated by light stabilization to the cured coating and improved dispersion in the aqueous dispersion as taught by Weikard.

It is respectfully submitted that the distinctions between Sydes and the present invention set forth above are equally applicable to the present rejection. There is no suggestion or motivation to combine both references. The coatings of Sydes require a reactive silicon emulsion, whereas the claimed subject matter utilizes a non-reactive silicon emulsion. Further, the coating composition of Weikard requires the presence of (I) polyisocyanate, (II) polyurethane, and (III) initiator (col 2, lines 17-26). Weikard further teaches that the process of postcuring the polyisocyanate with the polyurethane dispersions (that contain few or no active hydrogen atoms) at 0-200°C, and preferably 20-100°C, results in a coating that is resistant towards liquids and stains (col 2, lines 5-6, 13-14; col 15, lines 50-54). In contrast, the claimed subject matter does not require the presence of polyisocyanate nor postcuring to produce abrasion and high weather resistant coating. Weikard merely teaches that photoinitiators that are easily incorporated into aqueous coating compositions are preferred (col 14, lines 54-56) but fails to teach that the oligomeric hydroxyl ketone emulsion photoinitiator provides a high degree of crosslinking which enhances weather, solvent and abrasion resistance (page 4, lines 15-19). A skilled artisan would not look to Weikard to achieve an ultraviolet curable, water-based coating composition that does not require the use of polyisocyanate and postcuring. It is respectfully submitted that, based on the differences between the required ingredients of each composition, one skilled in the art would not combine the photoinitiator of Weikard in the invention of Sydes.

Neither Sydes nor Weikard, even when combined suggest an ultraviolet-curable coating that provides ice release, noise resistance, solvent resistance, abrasion resistance, and weathering resistance from a polyurethane dispersion, photoinitiator and non-reactive silicon emulsion. Instead, the coatings of Sydes require a reactive silicon emulsion to result in an abrasion resistant coating; and the coatings of Weikard require polyisocyanate and postcuring to result in abrasion resistant coating. The coating composition of the claimed subject matter does not require a reactive silicon emulsion nor polyisocyanate and postcuring process to result in an abrasion resistant coating. Even if one were to combine Sydes and Griswold, the result would still be different in that

there would be no improved noise or abrasion resistance or increased slip as provided by the silicone resin emulsion of the present invention. Accordingly, it is respectfully submitted that claim 2, 3, and 11-14 are patentable under 35 U.S.C. 103(a) over Sydes in view of Weikard et al.

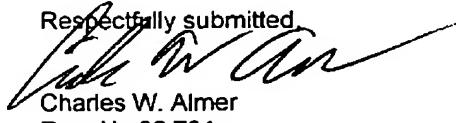
Claims 10 and 17 were rejected as unpatentable under 35 U.S.C. 103(a) over Sydes in view of U.S. Patent No. 5,525,427, issued to Griswold et al. With respect to claim 10, the Examiner urges that it would have been obvious to determine the optimum weight percent of silicone emulsion to employ in the composition suggested by Sydes alone or the teachings of Sydes and Griswold. With respect to claim 17, it is the Examiner's position that it would have been obvious to one skilled in the art to employ a polysiloxane having a methoxy group, as taught by Griswold, as silicone wetting agent in the compositions disclosed by Sydes in order to take advantage of its function as a bath life extender and a water repellent, taught by Griswold. The distinctions between Sydes and the present invention set forth above are equally applicable to the present rejection. The coatings of Sydes require a reactive silicon emulsion, whereas the claimed subject matter utilizes non-reactive silicon emulsion. The coating composition of Griswold comprises an amine functional polysiloxane emulsions, a crosslinking composition (adhesion promoter, surface active agent, and catalytic amount of catalyst) and bath-life extender (selected from polyurethane dispersion, water-reducible resin, or a combination) (col 2, lines 5-15). Unlike the present claimed subject matter, Griswold requires the use of a reactive (amine functionalized) siloxane emulsion. Further, Griswold teaches that the coating composition can be enhanced by the addition of an organic solvent, e.g. aliphatic hydrocarbon or an aromatic hydrocarbon (col 7, lines 61-65). Sydes, even when combined with Griswold, fails to even suggest the use of an organic solvent-free UV curable waterborn coating. Hence, one skilled in the art would not look to Griswold to make an organic solvent-free UV curable waterborn coating. Accordingly, it is respectfully submitted that claim 10 and 17 are patentable under 35 U.S.C. 103(a) over Sydes in view of Griswold et al.

Claims 13-14 were rejected as unpatentable under 35 U.S.C. 103(a) over Sydes in view of U.S. Patent No. 6,987,135, issued to Van Den Berg et al. It is the Examiner's position that it would have been obvious to one skilled in the art to employ a polyamide wax orgasol as taught by Van Den Berg, in analogous aqueous polyurethane dispersions taught by Sydes, motivated by a reasonable

expectation that the polyamide additives would function advantageously in the dispersions disclosed by Sydes. The distinctions between Sydes and the present invention set forth above are equally applicable to the present rejection. The coatings of Sydes require a reactive silicon emulsion, whereas the claimed subject matter utilizes non-reactive silicon emulsion. Further, Van Den Berg teaches away from water-based coating. Van Den Berg discloses that one or more reactive diluents are preferred in the coating composition, where the reactive diluents are listed generally as ethylenically unsaturated compounds (col 6, lines 18-21). As suggested in Examples 1 (without reactive diluents), Example 2 (with reactive diluents), and Table 2, the coating composition of Van Den Berg had better appearance and starch resistance with the reactive diluents. Hence, one skilled in the art would not look to Van Den Berg to make a reactive diluent-free UV curable waterborn coating. Accordingly, it is respectfully submitted that claim 13-14 are patentable under 35 U.S.C. 103(a) over Sydes in view of Van Den Berg et al.

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance. If there are any issues that the Examiner wishes to discuss, she is invited to contact the undersigned attorney at the telephone number set forth below.

Respectfully submitted,



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December 21, 2006